



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,791	08/25/2003	Maimon Eliyahu	26587	1225

7590 08/05/2005

ELIYAHU MAIMON  
70/4 HaATZMAUT ST. 28219 KIRYAT ATA  
ISRAEL  
ISRAEL,  
ISRAEL

EXAMINER

CHAPMAN, JEANETTE E

ART UNIT	PAPER NUMBER
----------	--------------

3635

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/646,791	<b>Applicant(s)</b> ELIYAHU ET AL.	
	<b>Examiner</b> Chapman E. Jeanette	<b>Art Unit</b> 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 April 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

*A*

Art Unit: 3635

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,3-5,15-17 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riefler (4098040) in view of Osborne (4651485) and Snitowski (4802318).

Regarding Claims 1,17 and 18: Riefler discloses modular wall segments 2 for constructing a wall, comprising first and second external layers of a selected two – dimensional shape and size, and a plurality of concrete blocks contiguously located in a plurality of rows and columns between said first and second external layers to form a volume of consistent thickness of selected two dimensional shape and size. Riefler discloses that said external layers 49, 50 are plastered with a cement fiberglass composition, column 2, lines 32-33 (which is a finished veneer). Riefler does not specifically disclose that said first and second external layers are walling sheets that are bonded to said a plurality of concrete blocks, that said walling sheets are selected from the group consisting of plywood, gypsum board, cement board, cement board, composition-board, plasterboard, and wallboard or that said concrete blocks are aerated concrete blocks. Osborne teaches that it is known to use either an exterior sheathing or finished veneer 50 on the exterior side of a concrete block wall, column 5, lines 33-40, wherein the sheathing is attached to the wall by means, column 5, lines 37-

Art Unit: 3635

40, and Snitovski teaches that is known to use aerated blocks, i.e. YTONG blocks, to form a wall, column 3, lines 25-26.

Regarding the external layers, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use walling sheets in place of the plaster used by Riefler, because, as taught by Osborne, finished veneers and walling sheets are used interchangeably for the surfaces of concrete block walls. Therefore, one having ordinary skill in the art would have been capable of determining which surface they would have preferred as a matter of obvious design choice.

In regard to the type of walling material and the conventional fastening means, the examiner takes the position that a conventional fastening means is known by those having ordinary skill to include adhesive. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute sheathing in the form of plywood or gypsum for Riefler's plaster or external layers, because as taught by Osborne, both materials are interchangeable. Further, by using plywood or gypsum wallboard adhered to the surface of the internal layer, the outer surface of the walls could be painted or decorated in ways that plaster would not allow. Also, plywood and gypsum wallboards are often attached to cement block walls to provide a more pleasing finish to said walls. The examiner would also like to point out that by using adhesive to secure the external layers to the internal layer, the external layer would be bonded to the entire outer surface of the internal layer. Thus, a strong bond will be accomplished between the layers.

Regarding the concrete blocks, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use aerated concrete blocks for Rieflers's wall panel, because the aerated concrete blocks will be lighter in weight. Therefore, the wall panels could be made lighter without sacrificing the strength of conventional cement blocks. Further, the aerated concrete blocks are well known in the art and that it is within the level of one having ordinary skill in the art to choose from a group of known cement blocks and select the best for a particular application.

Regarding claim 3, Riefler in view of Osborne and Snitovski disclose the basic claimed intervention, wherein said plurality of aerated concrete blocks include a quantity of a bonding material 56 between them to augment their securement together within a the modular wall segment by said walling sheets.

Regarding claims 4-5, Riefler in view of Osborne and Snitovski disclose the basic claimed invention, wherein the modular wall segment is formed on at least one end face with a slot that is capable of receiving a fastening element to secure the modular wall segment to other modular wall segments. Said slot extends longitudinally through all the aerated concrete blocks at the respective end of the modular wall segment. The slot can be seen in figure 1 as the space between member 30 and the end of the wall. The slot is substantially V-shaped.

Regarding claim 15, Riefler in view of Osborne and Snitovski disclose the basic claimed invention, wherein said segment includes reinforcement strap 7 passing through said plurality of aerated concrete blocks. Although, Riefler does not specifically disclose that said straps are cables, the examiner contends that both the straps and

Art Unit: 3635

cables are equivalent for their use in the reinforcing art and the selection of any of these known equivalents to secure the blocks together would have been within the level of one having ordinary skill in the art. The examiner would like to point that steel cables are often tensioned to provide reinforcement to a structure. Thus, both the steel straps and the steel cables are capable of being tensioned in the same manner.

Regarding claim 16, Riefler in view of Osborner and Snitovski disclose that basic claimed invention, wherein said cable/straps are passed through channels formed in said plurality of aerated concrete blocks and terminate in ends that are capable of being secured to load bearing structures to provide protection against earthquakes. The examiner would like to point out that the ends of the straps have members 11 and 12 attached to them. Therefore, members 11 and 12 are the ends of the cables/straps that are capable of being attached to the load bearing structures.

Regarding claim 19, Riefler in view of Osborne and Snitovski disclose a building structure including walls made of a plurality of modular wall segments according to claim 1 secured together, column 1, lines 6-16.

Regarding claim 20, Riefler in view of Osborne and Snitovski disclose the basic claimed method of making a wall segment useable for constructing a wall segment comprising applying a first layer of glue (i.e. a conventional fastening means) between a first walling sheet and a first surface of a plurality of contiguously placed aerated concrete blocks arranged in a plurality of rows and column, applying a second layer of glue (i.e. conventional fastening means) between a second walling sheet and a second walling surface of said plurality of contiguously placed aerated blocks, and pressing the

Art Unit: 3635

layers to form a wall panel. Said steps can obviously be seen in the above rejections of claims 1 and 22, and column 1, lines 41-42. Claim 1 deals with limitations of cellularized cement blocks, claims 1 and 22 deal with the use of adhesive, lines 41-42 deals with the contiguously placed step. Therefore, all of the method steps are obviously disclosed by Riefler and Osborne.

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riefler in view of Osborne and Snitovski and further in view of Vale (GB 2057529)

Regarding claim 5 and 6, Riefler in view of Osborne and Snitovski disclose that basic claimed invention except for specifically disclosing that said slot is defined by the two walling sheets projecting outwardly past the plurality of aerated concrete blocks at the respective ends of the modular wall segment or that the modular wall segment includes a U shaped channel member received in said slot. Vale teaches that it is known to use rigid members 11, 13 as the walling sheets for a modular wall panel, wherein said member 11,13 project beyond a respective end of an internal member to form a slot which has a U shaped channel member therein. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Vale's external panels and U-shaped member into Riefler in view of Osborne and Snitovski's Invention, because by forming the slot as taught by Vale and using the U shaped member, Riefler in view of Osborne and Snitovski's panels could be assembled in a faster more efficient manner. This is so because one would not have to first erect the column members 30 and then place the panels into position. The slot and th u-

Art Unit: 3635

shaped member would allow one to set the panels and connect the end in one step.

Therefore, this would allow for a savings of time and money.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Riefler in view of Osborne and Snitovski and further in view of Gregori (3420023).

Riefler in view of Osborne and Snitovski disclose the basic claimed invention, wherein one end face of the modular wall segment is formed with said slot. However, Riefler does not specifically disclose that the opposite end face is formed with a rib dimensioned to be received in said slot of another like modular wall segment. Gregori teaches that it is known to form a wall panel having rigid external layers adhered to a plurality of block-like elements, wherein one end of the panel has a slot and the opposite end has a rib dimensioned to be received in said slot of another similar wall panel. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Gregori's external panels and rib member into Riefler in view of Osborne and Snitovski's invention, because by forming the slot and rib member as taught by Gregori, Riefler in view of Osborne and Snitovski's panel could be assembled in a faster more efficient manner. This is so because one would not have to first erect the column members 30 and then place the panels into position. The slot and rib member would allow one to set the panels and connect the ends in one step. Therefore, this would allow for a savings of time and money

Claims 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riefler in view of Osborne and Snitovski and further in view of Iotti (4306396).



Riefler in view of Osborne and Snitovski disclose the basic claimed modular wall segment in combination with a fastening element 30 to secure the modular wall to another modular wall segment. Riefler in view of Osborne and and Snitovski do not specifically disclose that said fastening element is dimensioned to be received in said slot to secure the wall segments together. Iotti teaches the use of wall segments attached in almost the same manner as disclosed by Riefler, i.e., the use of an I-shaped member attaching two adjacent modular wall panels (figures 1 and 2). However, Iotti also teaches that it is known to be use different shaped members for the same purpose, i.e. a cruciform shape (figure 7) that fits in opposed slots of opposed panels to attach said panels together. Iotti also teaches that it is known to connect two wall segment of the same dimensions together at their planar outer faces to construct a wall. It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute Iotti's cruciform shape for the I shape since the examiner takes the position that both shaped are equivalent for their use in the panel connecting art and the selection of any of these known equivalents to attach adjacent panels would be within the level of one having ordinary skill in the art. Further, both the I-shape and the cruciform shape will hold the panels together in an equally efficient manner. Although, Riefler and Iotti do not disclose that said fastening element is T-shaped or of hollow rectangular cross-section, the examiner takes the position that these shapes are also functionally equivalent to the I shape and the cruciform shape. All of the above shapes are notoriously well known in the art for connecting ends of adjacent modular wall panels. Finally, it would have been obvious to connect the planar

Art Unit: 3635

outer faces together by lotti in figure 8, because by fastening the edges of the faces together, the gap between the edges will not be noticeable in the finished wall.,

Therefore , the wal includes an insulating layer 38 between the two joined segments.

### **DOUBLE PATENTING**

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 USC 101 which states that "whoever invents or discovers any new and useful process.....may obtain a patent therfor...." (Emphasis added). Thus the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg Co*, 151 U.S. 186 (1894); *In re ockert*, 245 F.2d 467 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 USC 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 USC 101

Claims 1-2 are rejected under 35 USC 101 as claiming the same invention as that of claims 1-18 of prior U.S. Patnet Number 6679021. This is a double patenting invention. Claims 1-2 of the above referenced application is identical to patented claim 1.

Applicant's arguments are moot given the new ground of rejection

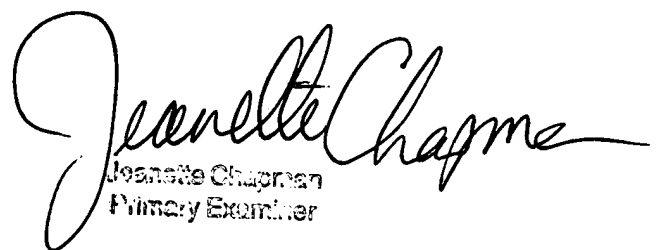
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeanette Chapman whose telephone number is 571-272-6841. The examiner can normally be reached on Mon.-Fri, 8:30-6:00, every other fri. off.

Art Unit: 3635

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Friedman Carl can be reached on 571-272-6842. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jec

  
Jeannette Chapman  
Primary Examiner